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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,600	10/28/2005	Joachim Kroll	MOS01 P-116	7111

28101 7590 08/06/2007
VAN DYKE, GARDNER, LINN AND BURKHART, LLP
SUITE 207
2851 CHARLEVOIX DRIVE, S.E.
GRAND RAPIDS, MI 49546

EXAMINER

ADAMS, GREGORY W

ART UNIT	PAPER NUMBER
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3652

MAIL DATE	DELIVERY MODE
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08/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,600	KROLL ET AL.	
	Examiner	Art Unit	
	Gregory W. Adams	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/11/05, 7/21/05</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Fantuzzi (US 5,951,226).

With respect to claims 1, 2, 19-23, Fantuzzi discloses a handling facility at a seaport or inner harbor with a container terminal arranged alongside a wharf comprising:

- at least one elevated stacking crane 155 per storage module;
- cross transporters 162 acting independently of each other and able to travel on a different horizontal level transverse to the individual storage modules;
- more than two of said cross transporters 162 being adapted to move on a same level beneath a transport level of an elevated stacking crane 155 and above truck loading lanes (indicated generally as 16) and on at least one railway (FIG. 74: 164; C4/L39) extending transversely to storage modules into a region of interim storage stations (indicated generally as 8) assigned to each storage module, each of said interim storage stations being arranged sideways and parallel to said at least one railway and forming interfaces

between said at least one elevated stacking crane and said cross transporters.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Swain et al. (US 4,273,494).

With respect to claims 3, 4, Fantuzzi does not disclose a functionality for a transfer or receiving device that can shifting or traveling into a region transverse to a cross transporter direction of travel. Swain et al. discloses the functionality including a transfer or receiving device that can shift transverse to a cross transporter direction of travel which allows more shifting of substantial weights into storage compared with fork lift type shifters which cannot move the volume much less enter the dense type of storage spaces, e.g. tight confinements. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include the functionality including a transfer or receiving device that can shift transverse to a cross transporter direction of travel, as per the teachings of Swain et al., to move incrementally heavier containers into tight spaces.

Claims 5, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Swain et al. and Quiring (US 6,835,040).

With respect to claims 5, 17, Fantuzzi does not disclose angle brackets or sideways running open slots. Quiring discloses angle brackets and sideways running open slots such that an article for transfer by a cross transporter can be accessed directly by said cross transporter without a partial removal step prior to pick up by said cross transporter. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include angle brackets and sideways running open slots, as per the teachings of Quiring, to reduce a step during cross transport.

Claims 6-12 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Swain et al., Quiring and Iacco (US 3,583,584).

With respect to claims 6-12, 18, Fantuzzi does not disclose a hydraulic piston and cylinder lifting device. Iacco discloses a cross transporter 24 having hydraulic piston and cylinder units 30 particularly suited to handling large cargo containers. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include hydraulic piston and cylinder units, as per the teachings of Iacco, to handling large cargo containers in an inventory storage compartment.

Claims 13 & 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Quiring (US 6,835,040).

With respect to claim 13, Fantuzzi does not disclose angle brackets or sideways running open slots. Quiring discloses angle brackets and sideways running open slots such that an article for transfer by a cross transporter can be accessed directly by said

cross transporter without a partial removal step prior to pick up by said cross transporter. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include angle brackets and sideways running open slots, as per the teachings of Quiring, to reduce a step during cross transport.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Quiring and Iacco.

With respect to claim 14, Fantuzzi does not disclose a hydraulic piston and cylinder lifting device. Iacco discloses a cross transporter 24 having hydraulic piston and cylinder units 30 particularly suited to handling large cargo containers. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include hydraulic piston and cylinder units, as per the teachings of Iacco, to handling large cargo containers in an inventory storage compartment.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Quiring.

With respect to claim 15, Fantuzzi does not disclose angle brackets or sideways running open slots. Quiring discloses angle brackets and sideways running open slots such that an article for transfer by a cross transporter can be accessed directly by said cross transporter without a partial removal step prior to pick up by said cross transporter. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to

include angle brackets and sideways running open slots, as per the teachings of Quiring, to reduce a step during cross transport.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fantuzzi in view of Quiring and Iacco.

With respect to claim 16, Fantuzzi does not disclose a hydraulic piston and cylinder lifting device. Iacco discloses a cross transporter 24 having hydraulic piston and cylinder units 30 particularly suited to handling large cargo containers. C1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Fantuzzi to include hydraulic piston and cylinder units, as per the teachings of Iacco, to handling large cargo containers in an inventory storage compartment.

Conclusion

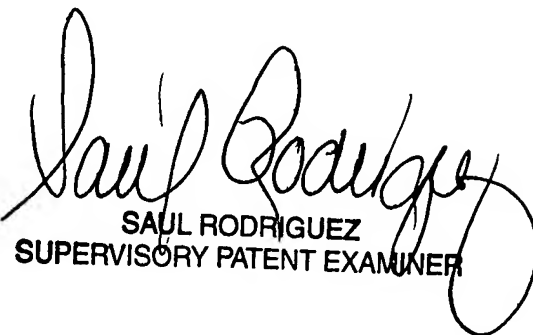
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (571) 272-8101. The examiner can normally be reached on M-Th, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on (571) 272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GWA *GWA*


SAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER